Get Connected

13 Tips For Getting The Most Out Of Your Digital Projector

You've been there: sitting in an audience waiting for a presentation or meeting to begin. Waiting and watching as the presenter fusses with the digital projector and the laptop, trying to make the two communicate with each other. Worse, perhaps you've been in the hot seat, sweating as a roomful of people watch you rush to get your PowerPoint presentation on that big screen.

Connecting a notebook to a digital projector doesn't have to be difficult; you just need to know the basics and have the right cables on hand. It doesn't hurt to arrive 10 to 15 minutes early to set up the equipment, either.

1 Know Your Video Ports

The most important connection to make is the one between the laptop and the projector. Your laptop might have a VGA (Video Graphics Array) or S-Video port for video output. Find the same type of connector on the projector, and while both the laptop and projector are off, use the proper cable to connect the two. (Although some laptops and some projectors will tolerate plugging in cables while they're on, it's a good idea to leave both off until you have connected them.)

Many projectors have both an S-Video port and a VGA port. The latter is usually the better choice for laptop presentations. VGA will provide a sharper image at a higher resolution than S-Video.

2 Adapting To DVI

Newer laptops may have a DVI (Digital Visual Interface) port instead of VGA, but your projector might not have DVI input. In this case, use a DVI-to-VGA adapter to attach the two ports. Older PowerBooks have yet another type of video connector; you'll need to connect it to a projector using a different conversion adapter (a Mac-to-VGA adapter).

3 External Video

Once they are connected, power on the projector first and then the computer. Many laptops do not automatically send video to the video port; you will need to set it to use external video. Read the laptop's manual or check the manufacturer's Web site to find out how to do this. The procedures vary from model to model and are seldom intuitive.

4 Sound Advice

If your presentation uses audio, turn the laptop's volume almost all the way down. Connect the laptop's Audio Out port to the projector's Audio In port or the room's speaker system. (If the laptop has both a speaker jack and a headphone jack, use the speaker port.) After

the projector or room's speaker system has been turned on, gradually increase the laptop's volume until it sounds right. If sound becomes distorted, back off on the laptop's volume and increase the speaker system's volume.

5 Remote Control It

You can give a more dynamic presentation when you aren't hovering over the laptop the entire time. Some digital projectors can be connected to the laptop's mouse port, allowing you to control the computer using the projector's remote control. You don't have to make this connection, but it can be convenient. Some projectors include support for older-style PS/2 connections, while others support USB (Universal Serial Bus) connections. Either way, use the proper cable to connect the laptop's mouse port to the projector's mouse port. This may be labeled Mouse, Com, Serial, or USB. If it's a USB connection, the computer may see the projector as new hardware. Let it install the default mouse driver.

6 Remote Control It, 2

If the projector doesn't have a remote control, a presentation remote control such as the Keyspan PR-US2 ($59; www.keyspan.com/products/usb/presentationremote) or the Kensington Presenter Wireless Laser ($70; www.kensington.com/html/4390.html) will do the job. Both devices let you control the cursor and change PowerPoint slides from 40 to 50 feet away. To connect either, plug the receiver to the laptop's USB port and then use the arrow keys on the remote control to step through your presentation. Both units include laser pointers for drawing the audience's attention to on-screen elements.

7 Configure The Projector

If the laptop is sending video to the external video port but there's no image on the projector, you may need to set up the projector. Most projectors have several input sources; yours may discover the laptop automatically. If not, press the appropriate input button on the projector.

8 Double Vision

You may want to have the same image on the laptop's LCD (liquid-crystal display) screen and the video projector. This is called mirrored video. Or, you may want to have different information on each screen, which is necessary for using PowerPoint's Presenter View. Presenter View puts your notes, a preview of upcoming slides (which you can reorganize), and the elapsed time of the presentation on the laptop's screen, while the audience sees only the slides on the projected screen.

9 What's The Frequency, Kenneth?

Like a computer monitor, a projector is limited to a particular range of frequencies. If the resolution or refresh rate is too high using a VGA connection, the projector won't be able to show the image. It may show a distorted image or a message such as "signal out of range." If this happens, use the Display Properties control panel to set the frequency to 70Hz or lower and then try successively lower resolutions. In addition, the projector may have a button that forces it to resynchronize with the video source.

10 Native Resolution

The projector has a native resolution (the resolution at which it produces the best image). If the projected image is fuzzy or cropped, adjust the laptop's display settings to use the projector's native resolution. If you don't know what it is, try 800 x 600. If the projected image appears too small, with black borders on all sides, set the laptop to a higher resolution, such as 1,024 x 768. Once you're sure the resolution is properly set, you can adjust focus using the projector's focus knob, usually located near the lens.

In Windows XP, you can reach the Display Properties control panel by selecting the Start menu, Control Panel, and double-clicking the Display icon. Click Settings and then Advanced.

Remote controls such as the Keyspan PR-US2 let you run a PowerPoint presentation from 40 to 50 feet away.

11 No Need To Stand On Your Head

If the projected image is backward or upside-down, the projector is not configured correctly. A backward image means it is in rear projection mode but projecting from the front, or vice versa. An upside-down image means the projector is in ceiling mode (set for projecting upside-down from a ceiling mount) when it is on a flat surface, or vice versa. Use the projector's controls to change the settings.

12 Location, Location, Location

As the projector is positioned farther from the screen, the image gets larger but dimmer. Place the projector far enough from the screen so that all of your presentation's text is easily readable from the back of the room. If it isn't, consider using larger fonts.

When the image is trapezoidal, this is known as keystoning. It occurs when the projector is positioned well above or below the screen. The projector will have a set of buttons for correcting this distortion.

13 All Done

When your presentation is over, turn off the projector lamp but leave it plugged in; the fan needs to run for some time to cool the lamp and will turn off automatically. Not letting the lamp cool will dramatically shorten its lifespan. Don't turn off the projector until you're sure you're done. Some projectors won't turn on again until the lamp has completely cooled. PCT

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